

CHAPTER ONE

PURPOSE, NEED AND SIGNIFICANT ISSUES

THE PROPOSED ACTION

The Forest Service is revising the 1984 *Land and Resources Management Plan for the Arapaho and Roosevelt National Forests and Pawnee National Grassland* (called until now the existing *Forest Plan*) in order to address issues and concerns and legal and regulatory requirements.

THE UNDERLYING PURPOSE OF, AND NEED FOR, THE PROPOSED ACTION

The underlying purpose of the proposed action is to prepare a *Revised Forest Land and Resource Management Plan* (also called *Forest Plan, Proposed Revised Forest Plan*). The *Revised Forest Plan* will guide all natural resource management activities on the Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARNF-PNG) to meet objectives of federal law, regulation, and policy.

REASONS FOR REVISING THE 1984 *FOREST PLAN*

The three primary reasons for revising the 1984 *Forest Plan* were:

- To respond to a remand of *Forest Plan* decisions back to the ARNF-PNG's administration (the Forest) for further analysis
- To comply with mandates based on the *National Forest Management Act (NFMA)*
- To respond to an identified need resulting from the Monitoring and Evaluation process

The 1984 *Forest Plan* for the ARNF-PNG was finalized May 4, 1984. It was appealed by the Colorado Mountain Club. In July 1987 the Chief of the Forest Service remanded portions of the *Forest Plan* and its environmental impact statement back to the Forest for further financial and economic analysis of the timber program. In May 1989 the Regional Forester, with the concurrence of the Forest Supervisor, entered into an agreement with the Colorado Mountain Club to suspend action on the remand and to initiate revision of the whole *Forest Plan* instead.

The regulations implementing NFMA¹ instruct the Regional Forester to make periodic revisions of forest plans and to provide the basis for any revision. The following section describes the need to change the 1984 *Forest Plan* and presents the basis for the proposed changes within the context of the regulatory requirements.

The mandate to revise forest plans, and the basis for revision are found in the following section of the *Code of Federal Regulations* (CFRs):

36 CFR 219.10(g). Revision. A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly or when changes in RPA policies, goals, or objectives would have a significant effect on forest level programs. In the monitoring and evaluation process, the interdisciplinary team may recommend a revision of the forest plan at any time. Revisions are not effective until considered and approved in accordance with the requirements for the development and approval of a forest plan. The Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have changed significantly.

The need to initiate the revision was identified by the Forest Supervisor and documented in the *Five Year Evaluation: Forest Plan Monitoring and Evaluation Report for 1985 through 1990*. Major areas of potential change identified in the report required in-depth analysis since they could significantly alter the mix of goods and services from the ARNF-PNG. The report concluded that the 1984 *Forest Plan* should be revised to incorporate new management goals, objectives and direction for these areas. The first step of the revision process, *Planning Action No. 1, Identification of Purpose and Need* (PA1), listed the resource and management items which needed changing and described how those topics were chosen. The *Analysis of the Management Situation* (AMS), published in June 1993, was another step in the *Forest Plan* revision process. It refined the list from PA1, resulting in *major and minor revision topics*. These major revision topics were the focus of the *Forest Plan* revision. All documents cited here, along with the 1984 *Forest Plan*, may be found at the Forest Supervisor's office in Fort Collins.

OTHER REASONS FOR REVISING THE 1984 FOREST PLAN

Throughout the revision process, an Interdisciplinary Team (IDT) undertook a thorough review of Forest and Grassland resources, both past and present. The team has considered historical environmental conditions, historical use and occupation of all lands now occupied by the

¹ The Forest Service has been engaged in a comprehensive review and evaluation of NFMA planning regulations. As a result, a new proposed rule was prepared and circulated for public review and comment in April 1995. The Forest Service has concluded that although the 1982 regulation was well focused on the **development** of forest plans, additional direction was needed for **implementing** and **revising** existing forest plans. However, until the final rule is issued, forest plans will continue to be revised under the 1982 regulations.

ARNF-PNG, and past and current data inventories. Forest staff also engaged the public in a lengthy discourse concerning Forest management and the conditions of Forest lands and resources. Additionally, Forest staff reviewed and, in some cases, altered their scientific approach to Forest and Grassland management and implementation. While better data, a better historical perspective, and changing values among Forest and Grassland users may not by themselves have constituted a need to revise the *Forest Plan*, they contributed strongly to the overall direction and ultimate benefits of the revision.

Professional and public concern about the potential loss of species throughout the world is escalating. On June 4, 1992, USDA Forest Service Chief F. Dale Robertson announced that "an ecological approach will be used to achieve the multiple-use management of the National Forests and Grasslands. It means that we must blend the needs of people and environmental values in such a way that the National Forests and Grasslands represent diverse, healthy, productive, and sustainable ecosystems." [Robertson, F. Dale, Chief, USDA Forest Service. Letter (1330-1 Ecosystem Management of the National Forests and Grasslands) of June 4, 1992 to Regional Foresters and Station Directors with enclosure].

The Forests and Grassland will continue multiple-use management. Ecosystem management does not mean *preservation* alone, which many people misdefine as "*do no management*" or "*let nature take its course*." Ecosystem management means a change of focus from "*how can we mitigate our actions?*" to "*how can we sustain ecosystems while producing goods and services?*" If the Forest Service does not sustain ecosystems, it cannot sustain the production of goods and services. While this more clearly-defined strategy for multiple-use management alone may not have required revising the 1984 *Forest Plan*, the revision provides the ARNF-PNG with an opportunity to integrate the ecosystem approach more closely with multiple-use management.

The IDT also examined new or changed laws and policies as they relate to forest management and forest plan implementation. For instance, the Regional Forester is required to make a decision concerning the status of potential Wild and Scenic Rivers. The Regional Forester is also required by regulations implementing the *Leasing Reform Act of 1987* to decide which National Forest System (NFS) lands are available for leasing and is required to determine which lands are eligible for recommendation to Congress as potential wilderness areas. These required determinations are based on the *National Forest Management Act* (36 CFR 219.17(b)) and the *Colorado Wilderness Act*.

THE REVISION TOPICS EXPLAINED

As discussed on page 2, the AMS produced the major *revision topics*, which are the focus of the *Forest Plan* revision. The alternatives described in Chapter Two were developed, in part, by creating different responses to the questions raised by the revision topics and are compared by revision topic.

REVISION TOPIC: MAINTENANCE OF BIOLOGICAL DIVERSITY

Biological diversity (biodiversity) refers to "the full variety of life in an area, including the ecosystem, plant and animal communities, species and genes, and the processes through which individual organisms interact with one another and their environments" (USDA Forest Service 1991). Maintaining biological diversity is part of ecosystem management and must generally be addressed over large scales of space and time.

Maintenance of biological diversity is a new issue and was not fully addressed in the 1984 *Forest Plan*. Various goals, objectives, general direction and standards and guidelines addressed some elements of biodiversity, but the revision attempts to consider all key elements of the subject.

In Chapter Three of this *FEIS*, the elements of biological diversity, including vegetation composition, pattern, structure, disturbances, processes and functions are discussed and compared using a broad-scale or "coarse-filter" context within the ARNF-PNG. Then, at a finer scale, species and habitats that are rarer, more unique and more localized are discussed in relation to their habitats on the ARNF-PNG. Comparisons with conditions beyond the Forests and Grassland are also made to the extent possible.

The 1984 *Forest Plan* reflected an effort to comply with the many laws and regulations that covered the issues of its time. However, because some standards or guidelines were so broad or unspecific about certain actions, there was no way to ensure compliance. Specific methods for maintaining biodiversity and monitoring management activities contained in the revised *Forest Plan* represent both a scientific and a practical advance over the earlier *Forest Plan*. Developing these methods for management and monitoring are key elements described in this *FEIS* for the *Forest Plan* revision.

REVISION TOPIC: NATIONAL FOREST AND RESIDENTIAL INTERMIX

Many areas of the ARNF-PNG contain private lands adjacent to or intermingled with National Forest System (NFS) lands. These areas are called *intermix* lands. Increasing development can cause conflicts among residents, traditional forest users, and forest managers in these intermix areas. Generally, the residents have conflicting management objectives and different perceptions about how NFS lands adjacent to or near their properties should be managed.

Revision decisions on management in the intermix concentrate on finding ways to use and manage public lands without unnecessarily and adversely impacting private residential use, while retaining as much of the full range of public land values and uses as possible. The need for management direction specific to these areas and problems was identified in the AMS. The revision offers the opportunity to allocate lands to a prescribed management strategy (called a management area prescription) specifically developed for use on intermix areas that addresses these needs and concerns. The key elements analyzed are the numbers of acres to be allocated to the Intermix Management Area Prescription, their locations and the management strategy applied by this management area prescription.

REVISION TOPIC: OIL AND GAS LEASING

Oil and gas leasing is a point of concern to many people interested in the management of the Forests and Grassland. The oil and gas industries favor large acreages of available and authorized lands for lease and believe the effects of their activities can be mitigated. Other individuals see oil and gas development as a threat to biodiversity, recreation, and natural resources; some people would prefer little or no oil and gas development. The actual acres leased and developed will vary based on demand for oil and gas. Although the United States is a mineral-rich nation, it imports over 50 percent of its oil. The world price of oil is expected to increase during the 1990s and into the 21st century, and this may stimulate development of domestic resources.

The mandate to address this issue in the revision is found in 36 CFR 228.102 and its parent law, the *Federal Onshore Oil and Gas Leasing Reform Act of 1987*. This regulation requires that a leasing analysis be conducted and that the Forest Service determine what areas of NFS lands with federal minerals will be authorized by the Bureau of Land Management (BLM) for lease options.

The key elements analyzed are the effects of projected development on natural resources, and the decisions made on the numbers of NFS acres made available for leasing, their locations, and stipulations to be applied to mitigate the impacts when those lands are leased.

REVISION TOPIC: RECREATION-RELATED TOPICS

Both public comment and the Five Year Monitoring Report stressed that many aspects of recreation management needed to be reviewed with an eye to how well the ARNF-PNG was meeting increasing recreation demand, while preserving recreation settings. Increasing recreation demands have placed more pressure on resources and facilities. New goals and objectives are needed for each type of recreation use in order to prioritize budgets and investments and to define the mix of recreation settings that best meets the public's needs.

Key elements examined are the numbers and types of recreation facilities needed, the numbers of acres desired in each Recreation Opportunity Spectrum class (these are fully described in Chapter Three), scenic resource objectives, and possible additions to the National Rivers System.

Developed Recreation

Developed recreation use occurs at distinctly defined areas where facilities are provided by the Forest Service for concentrated public use. These include campgrounds, picnic areas, and visitor centers. Developed recreation use on the Forests and Grassland is expected to increase at an average annual rate of about three percent through the year 2005. Facilities are filled to capacity on most weekends from Memorial Day to Labor day. At developed sites within areas of national significance, facilities are filled to capacity on many weekdays during this same time period.

Many of the existing facilities and associated resources are in substandard condition from years of heavy use, compounded by budget constraints for facility operation and maintenance.

Dispersed Recreation

Dispersed recreation occurs on areas outside developed recreation sites. In 1993, dispersed recreation use made up about 68 percent of the total recreation use and is expected to increase at an average annual rate of approximately 8 percent. At such a rate of increase use will double every eight to nine years. There is a large surplus of land on the ARNF-PNG with potential to support additional dispersed activity opportunities well into the future. The key limitations to dispersed recreation, however, are access (roads, trails and how they are administered), parking, dispersed campsites, and availability of information on dispersed recreation opportunities.

Many trails and trailheads are in substandard conditions for reasons similar to those causing substandard conditions at developed sites. Paralleling developed recreation, the revision addresses the types of dispersed recreation opportunities the Forest should provide.

Recreation Settings

Settings which easily accommodated the use levels of ten years ago are now experiencing use levels that change the type and quality of the recreational experience. This situation, in some cases, is causing resource damage. Other resource management activities (e.g. timber harvest, grazing, conflicting recreation uses) are seen by some as infringing upon the quality of their recreational experience. Direction in the 1984 *Forest Plan* has been reviewed in light of current recreation use and resource management activities to ensure that the characteristics, when combined, create the desired recreation settings.

Scenic Resources

Scenic resources have been the focal point of appeals against projects that modify natural landscapes. In particular, there has been concern over the appearance of vegetation treatments such as timber cutting on the ARNF-PNG. The limits of acceptable change to scenery correlate directly to the "adopted visual quality objective" (VQO) for an area. The way the VQO direction was written in the 1984 *Forest Plan* resulted in differing interpretations of the desired resource condition or permissible management actions. Implementing the *Forest Plan* was consequently hindered by the need to determine VQO on a case-by-case basis.

Wild and Scenic Rivers

The need to evaluate rivers for their potential as designated Wild and Scenic Rivers during the *Forest Plan* revision process came from the *Wild and Scenic Rivers Act*, and resulting Forest Service directives. Public comments gathered since issuance of the 1984 *Plan* also indicated high interest in the study of rivers for designation.

The Forest needed first to identify candidate rivers, evaluate their eligibility, and then determine their suitability as potential Wild and Scenic Rivers. Direction for this process is found in the *Forest Service Rocky Mountain Regional Guide*. A systematic inventory of all rivers and streams on the ARNF-PNG helped identify candidate rivers. Eligibility studies determined that the North

Fork of the Cache la Poudre River, North St. Vrain Creek, Rock Creek, and Cabin Creek are eligible rivers.

REVISION TOPIC: ROADLESS AREAS

Several issues relating to roadless areas needed to be addressed in the *Forest Plan* revision. The Forest had to meet the statutory requirement to identify and evaluate roadless areas for wilderness recommendation to Congress. The Forest also had to review intended management for roadless areas under the 1984 *Forest Plan* to determine if that mix of land uses was best meeting the needs of Forest and Grassland users. The key elements analyzed were capability to meet the intent of the *Wilderness Act of 1964* and the availability, suitability and manageability of these areas as Wilderness. The decisions made included the numbers of acres and locations of recommended additions to the wilderness system, and management of those areas identified but not recommended.

Wilderness Recommendations

Roadless area analysis is required during forest plan revisions on all National Forests in Colorado by the *Colorado Wilderness Act* and nationally by the *National Forest Management Act*. A nationwide inventory of roadless and undeveloped areas on National Forests and Grasslands was finalized in 1979 along with a Final Environmental Impact Statement. This effort was called Roadless Area Review and Evaluation II (RARE II). The Colorado Wilderness Act released RARE II areas not recommended for wilderness or additional study from further evaluation until forest plan revisions were complete.

Roadless Area Management

In evaluating roadless area management the revision process needed to take into account widely divided public opinion. Some members of the public prefer continuing current management of roadless areas to provide opportunities for nonmotorized recreation, to maintain the current scenic qualities, or to maintain current ecological values. Others would like limited development allowing motorized use of these areas for recreational driving, or off-highway vehicle driving. Others would like the areas to be fully available for such uses as timber harvesting, oil and gas leasing, developed recreation sites, or other uses.

REVISION TOPIC: TIMBER-RELATED TOPICS

This topic deals with all key aspects of timber management and related issues. The key elements examined are the numbers of acres and locations of National Forest lands suitable and available for timber production, the amount of timber that will be produced, and the kind of harvest techniques that will be employed to produce timber.

Public interest in the timber issue is intense. Many of the conditions and issues surrounding timber management direction in the 1984 *Forest Plan* have changed and the Forest has needed to evaluate necessary modifications to update its direction. One of the primary reasons for the

revision of the *Forest Plan* was to resolve the appeal of the *Plan's* timber program. As explained earlier in this chapter, portions of the *Forest Plan* and its *Final Environmental Impact Statement* were remanded back to the Forest for further financial and economic analysis of the timber program.

Remand analysis showed that the ARNF-PNG had approximately 165,000 acres which were financially efficient to operate. This included 135,000 acres of sawtimber sized timber and 30,000 acres of poletimber sized timber. The areas were roaded or partially roaded and were either spruce/fir or lodgepole pine stands. The Forest ran into difficulty meeting the projected timber harvest levels because many of these areas had been previously harvested and were approaching the limits allowed by the 1984 *Forest Plan's* standards for late successional forests, water quality and sedimentation, big game cover, visual quality, and windthrow.

The ARNF-PNG's supply and demand situation for wood product economies has also changed since approval of the 1984 *Forest Plan*. The overall supply of timber in the northern Colorado-southern Wyoming timbershed has been declining since 1987, but demand has not declined and is now approximately twice the supply.

The decline in supply from the ARNF-PNG is due to the restrictions imposed by current laws, policy, and standards and guidelines. *Forest Plan* standards and guidelines take precedence over outputs where conflicts occur, so this situation is not likely to change. These differences need to be resolved in light of the legal requirements which mandate the production of timber from National Forests.

REVISION TOPIC: TRAVEL MANAGEMENT

Travel management remains one of the most controversial facets of forest management. Travel management plays an important role in every forest resource program. Demand for all types of travel in different settings that offer a range of challenges has continued to increase. Both motorized and nonmotorized forms of travel are increasing. As use of the Forest increases, the impacts to resources have become more noticeable and conflicts are occurring more frequently. The Forest needs to determine the proper balance in the type, extent, and utilization of Forest transportation facilities to resolve user conflicts and adequately protect resources.

The management direction and goals set forth in the 1984 *Forest Plan* were too general to establish priorities that best met the needs of most forest users. The *Plan* needed to be updated to give more direction regarding recreation settings and compatible travel modes. The key elements examined were the types of desired travel opportunities, the locations where the ARNF-PNG can provide these opportunities, and the strategy for providing them.

REVISION TOPIC: INSTREAM FLOWS AND WATER YIELD

Instream Flows

Water development is a vital use of the National Forests; one of the mandates of the National Forests is to ensure a continuous supply of clean water. The Forest Service is also charged with maintaining aquatic and riparian ecosystems.

Many cities, farms, and industries rely on water stored naturally in forested watersheds and in reservoirs on NFS lands as their primary water source, and demands are increasing. When the Forest Service is asked to allow construction of a reservoir that may cause detrimental effects to the ecosystem, the permitting process includes making sure that the effects are kept within legal standards. The 1984 *Forest Plan* prescribed minimum standards to be applied to projects that affect streamflow. Recent efforts by the ARNF-PNG to impose these standards, however, have met with intense controversy and signaled a need to reevaluate the water development policy in the *Plan* revision. The key element analyzed for this revision topic is maintaining sufficient flow in perennial streams while meeting the need for water storage and development.

Water Yield

Most of the water used along the Front Range and in the Upper Colorado basin originates in Colorado's National Forests. Often there is not enough to supply all demands. To help meet these demands, the 1984 *Forest Plan* included as one of its objectives the production of an average of 1,981 thousand acre-feet of water yield. Direction for management of watersheds to accomplish this goal was contained in Management Area Prescription 9B (Water Yield), a prescription eliminated in the revised *Forest Plan*.

Management Area Prescription 9B attempted to increase water yield through tree harvesting. Water that trees use becomes available as streamflow when the trees are removed. Although this increased water can be captured by users, the water-yield increases tend to occur during spring runoff when there is already an excess of water and an insufficient amount of available water storage.

Additionally, some members of the public believe that increased water yield and improved timing of flows through manipulation of forest vegetation was only a justification to harvest more timber. The 9B management area prescription included 160,332 acres of the ARNF-PNG. A key element of this revision topic is to find the best uses for lands formerly allocated to the water-yield prescription. Water-yield increases will still result from timber harvest, but will be considered a byproduct of timber harvest rather than a separate goal.

OTHER REVISION ITEMS (MINOR REVISION TOPICS)

There are other items that generally require minor, less controversial adjustments to existing *Forest Plan* direction. Many of these topics interlink with one another or with revision topics. Addressing them together during the revision process has allowed the direction to be efficiently

updated. These topics include: fire; land occupancy and uses; range management; research natural areas and special interest areas; existing and potential ski areas; soils; aquatic resources; and facilities and administrative sites.

DECISIONS MADE IN THE *FOREST PLAN* AND STAGED DECISION-MAKING

The adoption of a *Forest Plan* establishes key decisions for the longterm management of a National Forest. These decisions are:

- Establishment of forestwide multiple-use goals and objectives, including a description of the desired future condition of the National Forest (36 CFR 219.11(b));
- Establishment of forestwide management requirements (standards and guidelines), to fulfill the requirements of 16 USE 1604 (The National Forest Management Act) applying to the future activities (resource integration requirements 36 CFR 219.13 to 219.27);
- Establishment of management areas and management area direction (management area prescriptions) applying to future activities in that management area (resource integration and minimum, specific, management requirements 36 CFR 219.11(c)). Geographic Areas further refine management area direction based on the needs of a specific area;
- Establishment of lands administratively available for oil and gas leasing, the leasing decisions for specific lands, and the mitigation measures that will be applied to specific lease areas (36 CFR 228.102(d));
- Establishment of lands the Bureau of Land Management is authorized to lease, subject to validation and verification of NEPA analysis and documentation (36 CFR 228.102 (e));
- Establishment of land suitable for production of timber (16 USE 1604(k) and 36 CFR 219.14); and
- Recommendation to Congress areas for wilderness classification where 36 CFR 219.17(a) applies.
- Establishment of rivers eligible for Wild and Scenic River consideration and recommendation to Congress of suitable rivers for inclusion in the Wild and Scenic River System (16 USC 1271-1287, 36 CFR 297 and 47 FR 39454, Sept. 7, 1982).
- Establishment of monitoring and evaluation requirements (36 CFR 219.11(d)).

Regarding oil and gas leasing, the BLM is responsible for the management of subsurface activities of all federally-owned leasable minerals. The BLM, acting for the Secretary of the Interior, may lease the National Forest System lands identified in the Record of Decision.² Authorized leases will include the standard terms placed on federal oil and gas leases and may include special stipulations designed to protect surface resources. (See Appendix F of this *FEIS* and Appendix D of the revised *Forest Plan* for specifics.) **No project-level decisions are being considered as part of this revision.**

Environmental analysis will still need to occur for specific projects that carry out these decisions. This process is called "staged decision-making" because in order to carry out a project, a series of decisions will be necessary as specific details, locations, and conditions become more apparent. For example, a proposed wildlife habitat project using prescribed fire would require additional environmental analysis to discuss the site-specific effects of the proposal. Staged decision-making is a process upheld in U.S. District Court.

SIGNIFICANT ISSUES EXPLAINED

The National Environmental Policy Act (NEPA) defines "significant issues" as significant matters that are bound up in the proposed action and in the choice the decision makers have to make between alternatives. Significant issues are usually based on the intensity of public concerns. The revision topics are essentially the same as significant issues. Actually, each topic acts as an umbrella covering several issues or concerns related to the same subject. Significant issues are defined by their context (local, regional, or national) and intensity (degree of effect).

The focus of this *Forest Plan* revision has remained on multiple-use objectives. However, each alternative emphasizes different land and resource uses. As a result, each alternative emphasizes certain land and resource objectives while simultaneously de-emphasizing other land and resource use objectives. The intended result is a balanced trade-off between alternatives. Controversy over any decision is nevertheless inevitable and expected. Some people will find that a preferred alternative does not completely resolve their concerns for Forest and Grassland management because a decision was aimed at some level of balance that accommodated other, and often competing, interests. All of the eight revision topics attempt, to the greatest extent possible, to address a full spectrum of social, economic and biological concerns expressed by the public.

² The Record of Decision is the last step in the *Forest Plan* revision process. Upon its approval, after any appeals have been resolved, it signals the beginning of implementation for the revised *Plan*. The Record of Decision will be approved by the Regional Forester.

ISSUES AND TOPICS RAISED BUT NOT WITHIN FOREST SERVICE AUTHORITY TO ADDRESS

Several topics and issues raised by members of the public and other agencies are not addressed in any of the alternatives of this *FEIS*. They are described in more detail in *Planning Action No. 1 - Identification of Purpose and Need*. For example, a topic or issue may have required a solution that is outside the scope of the *Forest Plan's* decision-making authority. As noted earlier, the scope of the *Forest Plan's* decisions includes forestwide goals and objectives, standards and guidelines, management area prescriptions and allocations, the designation of land suitable for timber production, monitoring requirements, and wilderness recommendations. If the topic is not best resolved through one of those decisions, it is better handled in another process either through changes in National or Regional policy, changes in the law, or decisions made by other agencies.